

EC VS. AC – THE END OF THE ETERNAL FEUD

One thing should be made clear from the start: if you employ a fan at full load, you may choose AC or EC, whichever one suits your application best.

Since however most fans run at partial load, the advantages of the EC motor are undeniable. This chart illustrates the static efficiencies of two **ruck Air Movement** fans, the 16" Prime with AC motor and the 16" Prime Evo EC with EC motor, running at partial load.

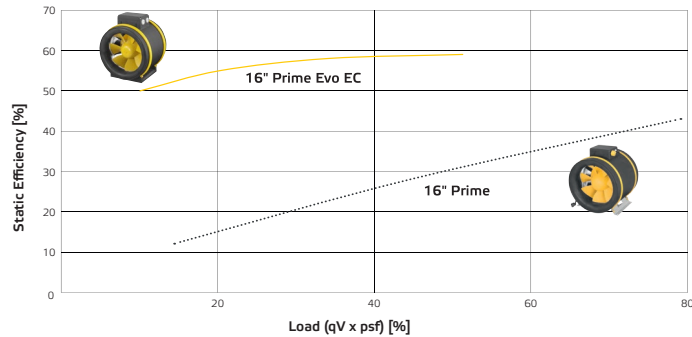
ENERGY AND COST SAVING POTENTIAL WHILE EMPLOYING AN EC DRIVEN RUCK AIRMOVEMENT FAN

ruck Air Movement develops highly efficient solutions for ventilation applications. Together with an outstanding aero-efficiency, the use of brushless DC motors ensures the highest overall efficiencies, which show their strength especially in the partial load range.

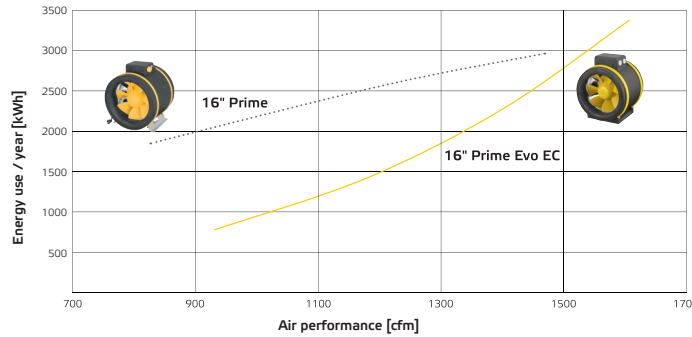
EC motors are permanent magnet motors in which the unit is electronically commutated. This commutation electronics uses a rectifier to convert the AC mains voltage to DC voltage and then applied controlled to the motor windings. Low winding temperatures and low losses ensure a long lifetime and high efficiencies for EC motors.

In ventilation units, compared to conventional AC motors, the EC motors generally require less power for the same flow rates. A special savings potential is achieved by the EC fans when used in partial load. Here the efficiency loss is much lower in case of EC fans compared to AC fans with similar capacity. With this technology, a more efficient, silent and continuous speed control is possible.

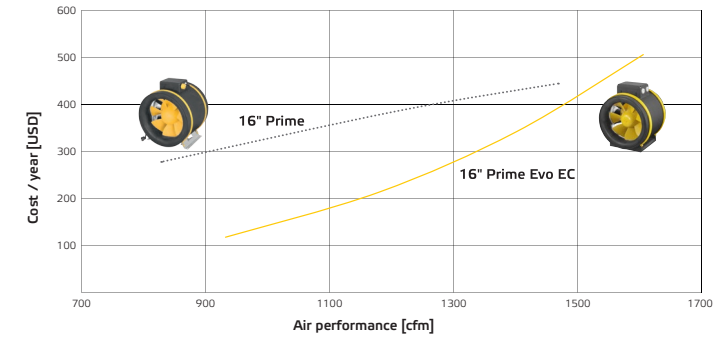
STATIC EFFICIENCY COMPARISON



ENERGY SAVING POTENTIAL



COSTS SAVING POTENTIAL



ADVANTAGES OF THE EC FANS:

- reduced energy consumption and lower costs, because of their high efficiency
- silent and simple operation, because of the stepless speed control
- the efficiency remains close to its maximum even at loads of less than 20% of the maximum load (while with AC the efficiency at half load is close to half of the efficiency at nominal load)
- generally require less power for the same flow rates

CHOOSE THE RUCK AIRMOVEMENT EC FAN RANGES

PRIME EVO EC



- The diagonal impeller and stator have high efficiency rates because of their aerodynamic function
- The energy efficiency increases with the use of EC motors
- The S-Prime Evo EC is sound insulated for very sound sensitive applications

S-PRIME EVO EC

